Guest Editorial

Value-based care in dentistry

I he future here?

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V a , a b a a b a , fi aa a a I a . , a benefi ab a a a , , I. a a ba ed aa - (VBC) determines the worth of health care services on the basis of their benefits (that is, health outcomes) relative to their associated costs, encouraging the provision of high-value services and discouraging the provision of low-value services. For instance, antibiotics for ear infections, mammograms for women younger than 40 years, and opioids for most dental surgeries are typically considered low-value services, but pediatric immunization and cholesterol and hypertension screening are considered high-value services.

The United States is a major outlier in terms of health care spending, with an average of $12,318 per person per year compared with $7,382 in Germany and $7,178 in Switzerland—the next highest spenders in the Organisation for Economic Co-operation and Development.[1] Overall spending is only 1 aspect of the value equation; when considering most health outcomes, such as infant mortality rates (5.4 deaths per 1,000 live births)[2] or obesity and being overweight rates (73.1% of the population),[3] the United States ranks far down the list. Excessive spending and lackluster health outcomes reveal the pressing need to reevaluate what we really get for our money.

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The US health care industry is undergoing a significant transformation from a fee-for-service (FFS) model based on volume of services to a value-based model based on health care outcomes. Under a value-based model, providers are reimbursed for the effectiveness of the care they deliver rather than the number and types of procedures they perform. Although VBC has the potential to remedy out-of-control health care spending and persistent health disparities, the transition from FFS is slow. We are a long way away from reaching a full VBC model.

The slow adoption of the VBC model is due to myriad challenges that the volume-to-value transformation poses. Over the past decade, experimentation and pilot programs have taught us more about what does not work than what does.[4] Therefore, this journey will require a host of changes as well as the involvement of all stakeholders in the health care ecosystem. Providers will have to establish data systems designed for measuring quality of care rather than for billing purposes. Public and private payers will have to introduce new payment models that reward positive health outcomes at both the patient and community levels. Drug and medical device manufacturers will have to enter sales agreements that underwrite the financial risk borne by providers. Regulators will have to adopt new strategies to allow the health care ecosystem to thrive and achieve excellent outcomes. Finally, patients will have to enhance their health literacy and participate in their own treatment plans. All of these changes require clinical, financial, organizational, educational, and cultural paradigm shifts.

In the United States, despite bipartisan support to achieve better health outcomes from the country's health care spending,[5] the volume-focused status quo has been largely preserved. The FFS system is lucrative for most industry stakeholders. Negative perceptions of the VBC transition and disagreement on what outcomes measures and incentives are needed make providers, payers, and organizations hesitant to take the first-mover advantage, which is the driver of most market-driven innovations across industries.

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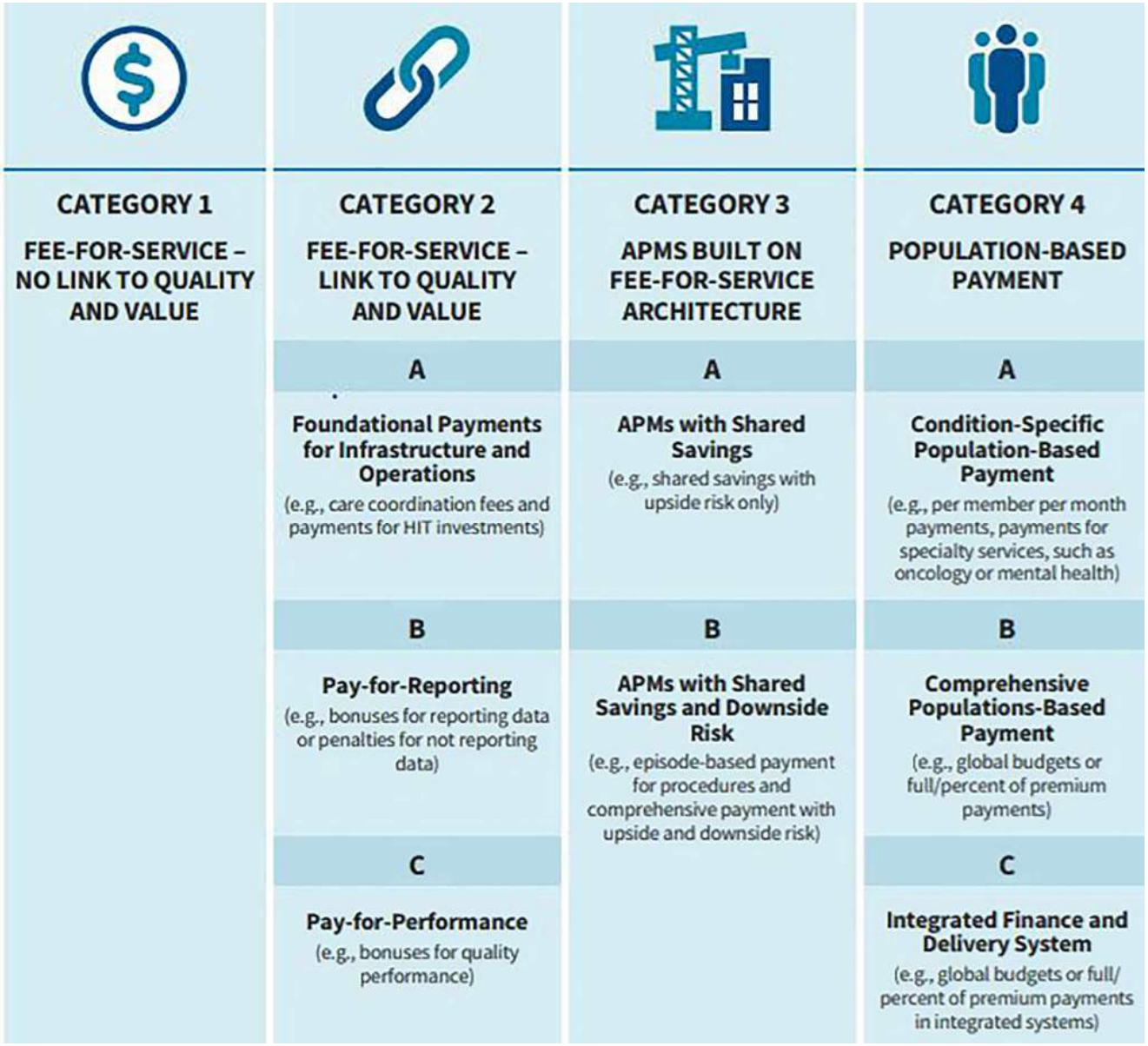

Figure. Fee-for-service to value-based care transformation. APM: Alternative payment model. HIT: Health information technology. Reproduced with permission of the publisher from Center for Health Care Strategies.[6]

With the growing acceptance of oral health as key to overall health, along with the growing role of health insurance coverage for oral health care, it is naïve to think dentistry will be excluded from the VBC movement. The United States and many other countries are already exploring the VBC model for dentistry. The challenges are certainly enormous, but there are already meaningful small steps being taken to transform the system. The figure captures the incremental stages from the FFS model to a full VBC model.[6] Most of what is happening in dentistry is category 2 reform, meaning dental services still fall under the FFS model, but provider compensation is based partly on value. Providers are rewarded for data reporting (pay-for-reporting) and the quality of their performance (pay-for-quality). The problem is that quality measures in dentistry are simply measures of appropriate service provision (for example, whether sealants were applied when clinically appropriate or whether fluoride treatments and dental visits were provided according to guidelines). Quality measures are not focused on oral health outcomes or technical evaluations of the procedures, which is likely what providers think of in terms of quality.

Several dental benefits plans, community-based health initiatives, and private technology companies are exploring VBC initiatives in the oral health care realm with an explicit goal of improving

Box 1. Elements of value-based care.

Patient-Centered Care	Value-based care puts the patient at the center of the care delivery process. Dental care providers must take the time to understand patients' unique needs, preferences, and goals for their oral health and tailor treatment plans accordingly.
Focus on Prevention	Patients must be educated about the importance of preventive measures, such as regular examinations and at-home oral hygiene practices to prevent dental disease from developing. Providers and patients can leverage tools such as smart toothbrushes to track healthy behaviors.
Evidence-Based Practice	Dental care providers should use evidence-based practices to deliver high-quality care. Evidence-based dentistry involves using the best available scientific evidence to inform clinical decision making and treatment planning. There needs to be a consistent focus on what is the most effective intervention to improve oral health for a given patient.
Integrated Care	Improving oral health outcomes requires collaboration with other health care providers to ensure that patients receive coordinated, comprehensive care. Dental care providers may need to work with primary care physicians to manage patients' chronic health conditions that affect oral health. In many cases, it will be difficult to improve oral health in a dentistry-only silo.
Continuous Improvement	Value-based care in dentistry involves continuous quality improvement. Dental care providers should track and analyze patient outcomes to identify areas for improvement and adjust their practices accordingly.

Box 2. Steps dental care providers can take to navigate value-based care.

Embrace It	Accept value-based care as the future model for dentistry. It is certainly a long way down the road, but make no mistake: it is down the road.
Be Prepared	Start amassing the clinical knowledge base. Assess the quality of clinical evidence on treatment protocols associated with a particular diagnosis and a particular patient risk profile. Focus on care standardization when the evidence exists and limit variation in treatment patterns across providers, regions, and health care systems.
Lead It	Dentists cannot afford to be on the sidelines. They need to lead and shape this movement. Set up key stakeholder groups now. As noted, there are major issues that need to be worked through to make this model a successful one. Engage in discussions about how to meaningfully define and measure oral health outcomes and identify what systems and tools are needed to collect data and achieve effective patient engagement.
Be an Early Adopter	Invest in data and institutions. Value-based care requires detailed diagnoses data, outcomes data, and risk-factor data. Stakeholder groups need to lay out the parameters for all of these systems.

oral health outcomes. Liberty Dental Plan, a dental benefits network that administers both private and Medicaid managed care benefits, piloted its Benefits and Rewards for Utilization, Services and Healthy (known as BRUSH) outcomes program to incentivize preventive oral health care among providers.[7] Providers use a clinical chairside caries risk assessment form to direct patients to appropriate care on the basis of risk level, and providers are paid, in part, on the basis of patient outcomes. Delta Dental of Massachusetts, similarly, has a standardized way of identifying patients at high risk of developing dental disease, providing enhanced benefits for these patients, and

incentivizing providers to follow evidence-based care guidelines.[8] The program called Preventistry has led to a reported 30% increase in children receiving fluoride and a 30% increase in periodontic patients undergoing periodontal maintenance. Dentists reported that Delta Dental's 100% coverage for these particular services has shifted their practice toward prevention-based care.[9] The Dental Transformation Initiative, a program under Medi-Cal, offers dentists in certain counties additional payments when their patients remain in their practice for a certain amount of time and adhere to preventive recall protocols.[10,11] Beyond provider compensation, VBC requires complex administrative changes. Data analytic companies, such as P&R Dental Strategies, are providing key data infrastructure that stakeholders need to measure the impact of VBC efforts.

Zooming out to the big picture, VBC models in dentistry are likely to share the 5 elements in Box 1. If you are a provider reading this and thinking "this is a terrible idea," "we need to stop this," "I can't control people's health," or feeling really uncomfortable or angry, you are not alone. The VBC movement is disruptive, especially to providers.[12,13] It is not what medical and dental schools have been training students to do. Nevertheless, although the process is slow for the reasons we mentioned, there is a consensus around its inevitability. There is no turning back on this journey. See Box 2 for our advice to the provider community.

CONCLUSION

VBC in dentistry is an approach that prioritizes the patient's needs and preferences, aims to achieve optimal oral and overall health outcomes, and uses evidence-based practices to deliver high-quality care. This is the future. Let us bring it a step closer. ■

https://doi.org/10.1016/j.adaj.2023.04.001

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Disclosure. Drs. Vujicic and David did not report any disclosures.

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